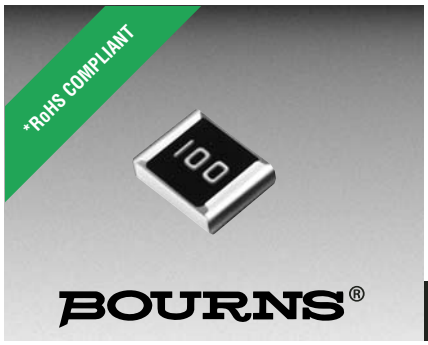


Features

- Special alloy resistor
- Power rating at 70 °C: CRA2010 - 1.5 W, CRA2512 - 3 W
- RoHS compliant*

Applications

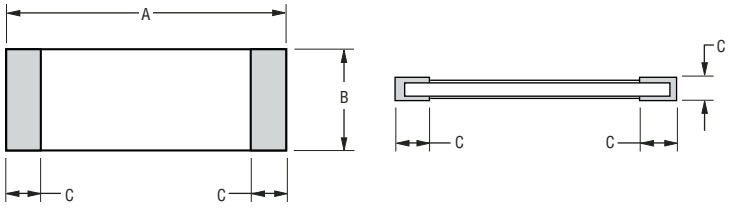
- Power supplies
- Stepper motor drives

CRA2010/CRA2512 - High Power Current Sense Chip Resistor

Electrical Characteristics

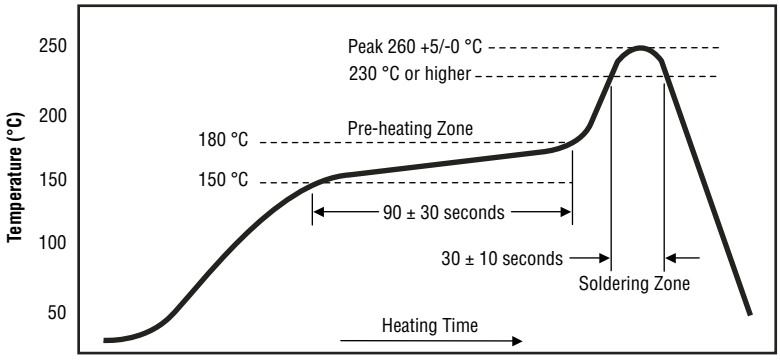
Characteristic	CRA2010	CRA2512
Power Rating @ 70 °C	1.5 W	3 W
Operating Temperature Range	-55 °C to +170 °C	
Derated to Zero Load at	+170 °C	
Maximum Working Voltage	$(P \times R)^{1/2}$	
Insulation Resistance	> 100 megohms	
Resistance Range	0.01 - 0.100 ohms	
Resistance Tolerance	±1 %, ±5 %	
Temperature Coefficient	±75 PPM/°C	

Product Dimensions



Model	A	B	C
CRA2010	5.0 ± 0.20 (0.1962 ± 0.008)	2.5 ± 0.20 (0.0984 ± 0.008)	0.6 ± 0.20 (0.0236 ± 0.008)
CRA2512	6.40 ± 0.20 (0.252 ± 0.008)	3.20 ± 0.20 (0.126 ± 0.008)	0.90 ± 0.20 (0.035 ± 0.008)

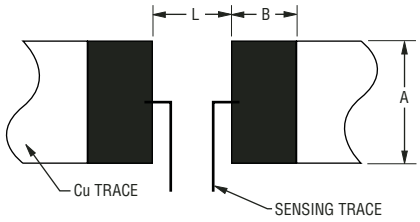
Soldering Profile



Characteristic Data

Test	ΔR Max.
Load Life (1000 hours)	< ±1 %
Short Time Overload	< ±0.5 %
Thermal Shock	< ±0.5 %

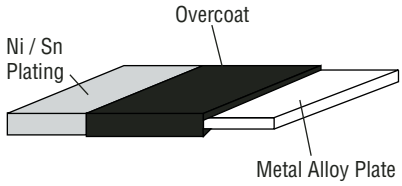
Recommended Solder Pad Layout



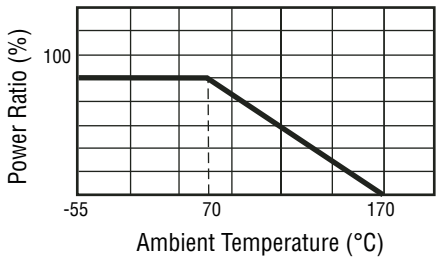
Model	A	B	L
CRA2010	3.1 (0.122)	2.7 (0.106)	3.1 (0.122)
CRA2512	4.0 (0.157)	2.1 (0.083)	4.1 (0.161)

DIMENSIONS: MM / (INCHES)

Construction

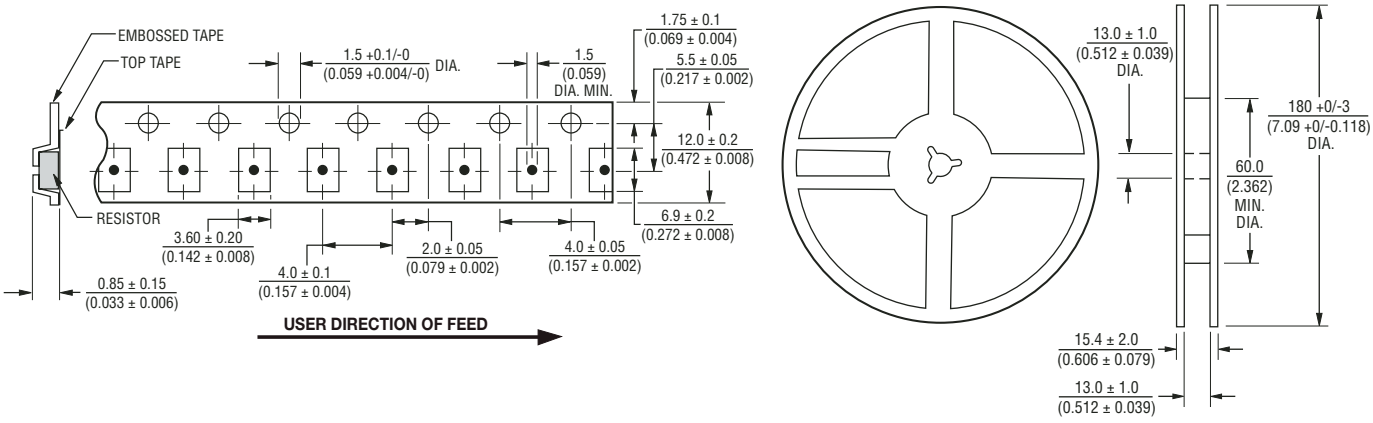


Derating Curve



*RoHS Directive 2002/95/EC Jan 27 2003 including Annex
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.

Packaging Dimensions (Conforms to EIA RS-481A)



Resistance Value Table

Code	R Value	Code	R Value
R010	0.010	R060	0.060
R017	0.017	R065	0.065
R020	0.020	R070	0.070
R025	0.025	R075	0.075
R030	0.030	R080	0.080
R034	0.034	R085	0.085
R040	0.040	R090	0.090
R045	0.045	R095	0.095
R050	0.050	R100	0.100
R055	0.055		

How To Order

CRA 2512 - G Z - R017 E LF

Model
(CRA = Precision Chip Resistor

Size
2010 = 2010 Size
2512 = 2512 Size

Resistance Tolerance
- F = ±1 %
- J = ±5 %

TCR (PPM/°C)
- Z = ±75 PPM/°C

Resistance Value
"R" (decimal point) followed by three significant digits (example: R025 = 0.025 ohm)

Packaging
- E = 4000 pieces on 180 mm (7 inch) reel

Termination
- LF = Tin-plated (RoHS compliant)

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